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AN ANALYSIS OF WORKERS' ATTITUDES TOWARD THE 4-DAY, 40-HOUR WORKWEEK*

by

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Abstract

Employees' attitudes toward a proposed 4-day, 40-hour workweek were examined relative to job and worker variables, expectations about the new workweek schedule, and job-aspect satisfactions. Employees classified by their sex, work shifts, wage schedules, and sex and work shifts differed significantly in their attitudes toward the 4-day, 40-hour week over the advantages and disadvantages they expected to result from the revised workweek. Except for pay and promotions, satisfaction with job aspects was not significantly correlated with preference for the proposed workweek. The importance to firms of first assessing and planning to deal with employees' expectations in relations to the 4-day, 40-hour week is discussed.

AN ANALYSIS OF WORKERS' ATTITUDES TOWARD THE 4-DAY, 40-HOUR WORKWEEK[1]

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A considerable number of companies in various industries have experimented in recent years with a work schedule of four, 10-hour days per week, thus maintaining the customary workweek of 40 hours. Unlike earlier union efforts to shorten the workweek, the 4-day, 40-hour movement was instigated by management (Poor, 1970) in the hope of achieving several goals including, inter alia, greater productivity due to fewer startups; improved recruitment of better employees; increased blocks of leisure time for employees; better employee morale; and reduction of absenteeism. Whether the 4-day, 40-hour plan contributes to or detracts from the accomplishment of these goals is subject to debate (Dankert, Mann, & Northrup, 1965; Kanter, 1970).

Although comparatively few American companies have converted to the 4-day, 40-hour workweek, available research evidence suggests that the effects of the new work schedule have been, in general, beneficial for both labor and management. Poor (1970) surveyed 27 American firms which had tried the 4-day, 40-hour workweek. She found that all 22 firms that continued the new workweek schedule (five firms discontinued the plan after several months to a

year) could show improvements in worker morale. Fifteen of the 22 firms experienced reduced absenteeism. Other improvements noted by these firms include increased number of qualified job applicants, reduction in labor costs, reduced tardiness, and increased output. Poor also reports that a high proportion (over 92%) of workers and managers were pleased with the new workweek, primarily because of the increased time for leisure and other off-the-job activities.

Similar positive outcomes were found by Wheeler (1970) in his survey of three small businesses. Two of these were on 36-hour workweeks and one on a 4-40 basis. These three firms reported increases in productivity, morale, and in the number of qualified skilled applicants, as well as decreases in absenteeism, utility costs, and turnover.

As implied above, however, not all firms that tried the 4-day, 40-hour work schedule found it to be advantageous. Five firms have reverted to their former schedules. Moreover, those firms continuing with the shortened workweek have experienced some disadvantages to the company and its employees. These have included scheduling difficulties, increased work load, employee fatigue, shipping and receiving problems, and poor customer service (Poor, 1970). For some firms, the 4-day workweek is not feasible due to customer requirements and preferences, equipment scheduling, or the nature of the product.

In instances where the 4-day, 40-hour workweek is technically feasible, its successful implementation (as in the case of any other innovation) depends upon prior planning that anticipates potential labor and non-labor problems and ways to deal with them. One factor which must be considered systematically

is employee reactions to a revised workweek which may require them to make significant adjustments not only in their work lives but their home lives as well. Successful conversion to a new workweek may depend upon management's foreknowledge of workers' attitudes toward the new workweek.

Plans for dealing effectively with worker sentiments need to be based upon an understanding of the factors underlying them. To aid in such understanding, the present study was undertaken to analyze workers' attitudes toward the 4-day, 40-hour workweek relative to (a) expectations about such a work schedule; (b) job (wage schedule, shift) and worker (sex, tenure) variables; and (c) satisfaction with various aspects of the job and company.

Method

Respondents and Site

Respondents were the employees (N=456) of an electronics assembly plant located in the Midwest. The sample was comprised of production, clerical, supervisory, and managerial personnel. None were unionized. Most employees were women (N=358) who lived in small, nearby farming communities.

Procedure

Approximately two weeks prior to the survey, employees were informed by their supervisors that they would participate in the company's triennial opinion survey. Employees were told that the survey would include a questionnaire asking their opinions regarding a 4-day, 40-hour workweek, the nature of which had been discussed previously with them. They were cautioned that, while their opinions would be taken into consideration, management's eventual decision regarding a

revised workweek would depend upon other business considerations as well. They were advised not to construe their stated opinions as ballots. Employees were also informed that the survey would be administered and analyzed by independent consultants (the authors) who would protect the anonymity of their responses.

Two questionnaires, developed by the company, were used in the survey. The first consisted of 76 multiple-choice items covering certain identifying information (e.g., shift, wage schedule, sex, and tenure) and the employees' feelings about several aspects of their jobs. The attitude items of relevance to the present study were clustered to form satisfaction "scales." The scales with their numbers of items (k) and internal consistencies (r_{kk}=coefficient alpha) are as follows: Supervision (k=14, r_{kk}=.87); Pay and Promotions (k=5, r_{kk}=.70); Company Benefits (k=12, r_{kk}=.72); General Management (k=8, r_{kk}=.64).

A second questionnaire dealt only with the 4-day, 40-hour workweek. The same identifying information as in the first questionnaire was requested. Open-ended items asked employees to express their expectation regarding personal advantages and disadvantages of the new work schedule. In addition, employees were asked to indicate on a 4-point scale (with an option for No Opinion) the degree to which they were for or against the 4-day, 40-hour workweek.

The survey was conducted one hour before the end of each workshift. Employees were either assembled in the plant's lunchroom or remained at their work stations, depending on the size of the shift force. The nature and purpose of the survey were explained again and employees were instructed to respond

individually, stating their personal opinions without group discussion. They were asked not to identify themselves on the questionnaires.

Results

Employee reactions (N=430) to the proposed 4-day, 40-hour workweek (4-40) are as follows: 43% Strongly Against; 10.7% Mildly Against; 15.6% Mildly Favor; 26.7% Strongly Favor; 4% No Opinion. While the majority of employees was against the 4-40, a large percentage was in favor of its installation. Moreover, majorities of those respondents in favor of or against installation were extreme in their opinion.

Differential attitudes toward the 4-40 were examined by categorizing employees according to their shift, wage schedule, sex, and tenure. In addition, the sex groups were categorized by tenure and shift to evaluate their interaction with sex.[2] Contingency tables were formed with these categories and the 4-point attitude scale.

These analyses revealed significant effects for sex ($X^2=52.62$, $df=3$, $p<.01$), shift ($X^2=26.58$, $df=6$, $p<.01$), wage schedule ($X^2=23.97$, $df=6$, $p<.01$), and the shift by sex interaction ($X^2=39.32$, $df=12$, $p<.01$). Table 1 elaborates the nature of the significant differences due to these categorizations.

Insert Table 1 about here.

(Tables 1, 2 and 3 will be found at the end of the paper)

As can be seen from the proportions, a majority of the hourly-paid workers was against the proposed workweek while the other two groups, salaried-nonexempt and salaried-exempt, were more favorably inclined toward the 4-40. Workers on the graveyard shift expressed the most disfavor with the new workweek. Dayshift workers were almost evenly split in their opinions, and workers on the night (swing) shift were intermediate in favor of the 4-40.

Males were clearly more in favor of the new workweek than were females. The interaction of sex and shift showed that female workers were against the 4-40, regardless of their shift, whereas male workers on the day shift were more favorable than male workers on either the night or the graveyard shifts. Both males and females on the graveyard were nearly unanimous in opposing the 4-40.

Attitude toward the 4-40 was examined further by analyzing the personal advantages and disadvantages employees expected to result from the new workweek. Reponses to the open-ended questions were content-analyzed by placing the personal advantages and disadvantages into a classification scheme. Using the classification variables found to be significant in the previous analysis, contingency tables were formed for each advantage and disadvantage, coded whether the advantage or disadvantage was mentioned or not.

Table 2 summarizes the results of these analyses and shows the proportions of employees who had mentioned each advantage or disadvantage.

Insert Table 2 about here.

Significantly, greater proportions of males, who were predominantly in favor of the 4-40, mentioned as advantages a three-day weekend ($X^2=8.63$, $df=1$, $p<.004$) and a day for business affairs ($X^2=13.33$, $df=1$, $p<.001$). Females, most of whom were against the 4-40, mentioned more frequently as disadvantages excessive fatigue ($X^2=10.14$, $df=1$, $p<.001$), upsetting family and personal life ($X^2=6.15$, $df=1$, $p<.02$), transporation difficulties ($X^2=27.28$, $df=1$, $p<.001$), and babysitter problems ($X^2=9.28$, $df=1$, $p<.003$).

The three-day weekend was also mentioned as an advantage by a significantly greater proportion ($X^2=11.13$, $df=2$, $p<.004$) of salaried-exempt employees, most of whom were also favorable toward the 4-40. Significantly larger proportions of hourly workers, most of whom were against the new workweek, mentioned as disadvantages reduced wages ($X^2=10.44$, $df=2$, $p<.006$) and transportation difficulties ($X^2=17.65$, $df=2$, $p<.001$).

With respect to shift groups, significantly greater proportions of day and night shift workers ($X^2=12.55$, $df=2$, $p<.002$) mentioned the three-day weekend as an advantage of the 4-40. A significantly larger proportion of day-shift workers also mentioned the advantage of having a day for business affairs ($X^2=10.64$, $df=2$, $p<.005$).

The disadvantages of upsetting family and personal life ($X^2=9.45$, $df=2$, $p<.009$) and reduced wages ($X^2=17.25$, $df=2$, $p<.001$) were mentioned by significantly larger proportions of workers on the graveyard shift. In addition, the personal disadvantage of early shift start was mentioned by a significantly larger proportion of day-shift workers ($X^2=19.06$, $df=2$, $p<.001$). Since this

group would have been most affected by the change in work schedules, this higher response rate was to be expected, regardless of day-shift workers' attitudes toward the 4-40.

Personal advantages and disadvantages were also examined by classifying workers by sex and work shift. However, only one advantage, an extra day for business affairs, was significant (χ^2 =32.42, df=2, $p<.001$). A significantly greater proportion of males (30%) on the day shift mentioned this category than females (10.7%).

Finally, the correlations between attitude toward the 4-40 and satisfaction with other aspects of the job were examined for the total sample. The correlations between these variables were analyzed further for subgroupings by sex, work shift, wage schedule, and tenure.

Table 3 presents the correlations between 4-40 attitude and each area of satisfaction for the overall group of workers. There was a weak but significant relationship between preference for the new workweek and satisfaction with pay

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Insert Table 3 about here.

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and promotions. No other significant correlations were obtained. The subgroup analyses failed to reveal anything more than minor, non-significant departures from the relationships established for the overall sample.

Discussion

The results of this study demonstrate that, despite all the positive features claimed for shortened workweeks such as the 4-40, workers are by

no means unanimous in their opinions about such a revision. Rather, the workers involved in this study were nearly evenly split in their opinions. However, this dichotomy of opinion was differentiated when examined relative to job and worker variables, viz., workers' preferences for the 4-40 differed between males and females, work shifts, wage schedules, and sex groups within work shifts. Attitudes toward the 4-40 did not appear to be related, in general, to satisfaction with various job aspects.

Differential attitudes toward the 4-40, as evidenced in this study, appear to be due to the consequences the new workweek might have for working and living conditions. Women, for example, expressed disfavor with the proposed workweek and gave as reasons the disruptions of their home and personal lives. Males, on the other hand, were favorable toward the 4-40 in terms of both a longer weekend and a week day during which to conduct their business affairs. Males did not express concern over the disruption of their home lives perhaps because they, unlike the women, were not involved with getting the children off to school in the morning, receiving them when they returned, and having dinner on the table. The new workweek would have made each of these tasks more difficult for the women, since the work day would necessarily start earlier and end later.

Hourly workers, generally against the 4-40, gave as reasons for their preference the difficulties they would have in arranging for transportation to and from work and for a babysitter during the new hours of work. The salaried groups, who presumably did not live as far from the plant, provided their own transportation, and were not faced with child-care problems, did not express these concerns and were generally more favorable toward the 4-40.

The expectations expressed by workers on the three work shifts also substantiate their preference for the proposed workweek. Thus, day and night shift workers, more of whom were in favor of the 4-40 relative to graveyard shift workers, gave as advantages the longer weekend and the weekday to conduct personal business. Graveyard workers were predominantly against the 4-40. They cited such reasons as disruptions of their personal and home lives and reduced wages. Since these workers would have to transfer to either the day or night shifts, their expectations can be regarded as reasonable. Similarly, a larger proportion of day-shift workers saw as a disadvantage starting the workday earlier in the morning. While night-shift workers would also have to start earlier, perhaps their having to start earlier in the afternoon rather than in the morning was seen as less inconvenient.

Workers' preferences for the 4-40 workweek was not related to their satisfaction with various job aspects, with the exception of satisfaction with pay and promotions. Contrary to the findings in our study, Gannon and Reece (1971) obtained weak, though significant, negative correlations between engineering technicians' preference for the 4-40 and satisfaction with their supervision (-.21) and co-workers (-.19) as well as total job satisfaction (-.21). It is likely that attitude toward a revised workweek would be associated with job satisfaction to the extent that it might affect sources of satisfaction and dissatisfaction. Perhaps in the Gannon and Reece study workers were better able to foresee how the 4-40 might affect satisfying and dissatisfying job factors.

The present study is exploratory in character. The results, however, suggest that employee expectation about the 4-40 are not all positive. Firms contemplating a revision of their work schedules, whether to the 4-40 or some variant of it, should examine potential dysfunctional consequences of such a change by analysing how the personal and working lives of their employees might be affected adversely. Once these potential problems are identified, the company can then consider and explore with its employees how these problems can be dealt with before instituting the change.

Another consideration, despite the weak relationships found so far, is the effect of a revised workweek on current sources of satisfaction or dissatisfaction. If employees expect that the new schedule will alleviate dissatisfying work conditions, and the new workweek then fails in this regard, satisfaction with the new workweek is likely to be shortlived. A similar outcome would occur if the new workweek resulted in unexpected adverse effects on sources of job satisfaction. Therefore, before changing work schedules, companies should evaluate the full impact of a new workweek and then inform employees of all changes that can be anticipated. In such a manner, erroneous or unreasonable expectations among workers can be dealt with in advance. All these considerations appear to be necessary for successful implementation of and continued benefits from a revision such as the 4-day, 40-hour workweek.

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Footnotes

1/ The authors wish to thank Douglas L. Young and Thomas E. Tice for their aid in data analyses.

2/ Other higher order contingencies with opinion were not examined because they were not logically independent.

TABLE 1

Percentages of Responses to the 4-40 Attitude Scale

Classified by Job and Worker Variables

4-40	Sex		Work Shift			Wage Schedule			Sex x Shift					
Attitude	M	F	D	N	G	H	S-N	S-E	M-D	F-D	M-N	F-N	M-G	F-G
Strongly Against	14.1	50.9	38.0	46.9	77.5	47.8	18.5	15.4	6.9	46.8	28.6	52.0	66.7	79.4
Mildly Against	7.6	11.7	11.0	10.9	7.5	10.2	14.8	12.8	8.3	12.0	0.0	14.0	16.7	5.9
Mildly Favor	21.7	13.8	18.1	7.8	7.5	14.3	25.9	20.5	23.6	16.4	14.3	6.0	16.7	5.9
Strongly Favor	51.1	20.4	29.1	28.1	5.0	23.9	37.0	46.2	58.3	21.2	35.7	26.0	0.0	5.9
Frequency[a]	87	323	314	60	39	350	26	37	70	241	11	49	6	33

Note.--Abbreviations: M=Male; F=Female; D=Day; N=Night; G=Graveyard; H=Hourly; S-N=Salaried Non-exempt; S-E=Salaried-Exempt.

[a]Employees with missing data or no opinion were not included in these analyses.

TABLE 2

Percentages of Employees Mentioning Personal Advantages and Disadvantages for Classifications Having Significant Contingencies with the 4-40 Attitude Scale

Advantages and Disadvantages	Classifications							
	Sex		Wage Schedule			Work Shift		
	M	F	H	S-N	S-E	D	N	G
Advantages								
1. More Home Life	20.7	16.4	16.0	26.9	21.6	16.0	21.2	17.0
2. 3-Day Weekend	**56.3**	**38.1**	**38.6**	**53.8**	**64.9**	**44.3**	**46.7**	**15.4**
3. Less Driving Time & Expense	12.6	10.8	11.4	3.8	13.5	11.7	6.1	11.6
4. Day for Business Affairs	**24.1**	**9.0**	10.9	15.4	21.6	**15.0**	**5.0**	**0.0**
Disadvantages								
1. Excessive Fatigue	**23.0**	**42.4**	38.9	46.2	27.0	39.4	30.3	39.4
2. Upset Family & Personal Life	**18.4**	**32.8**	30.3	34.6	37.0	**27.4**	**31.7**	**51.3**
3. Early Shift Start	23.0	19.5	20.6	7.7	27.0	**25.2**	**3.3**	**7.7**
4. Reduced Wages	8.0	16.7	**17.1**	**3.8**	**0.0**	**13.7**	**6.7**	**35.9**
5. Transportation Difficulties	**2.3**	**30.0**	**27.7**	**3.8**	**2.7**	18.1	27.3	25.3
6. Babysitter Problems	**2.3**	**15.2**	12.9	15.4	5.4	13.8	21.2	10.8

Note.--Boldface indicates that the contingency of the advantage or disadvantage with the classification was statistically significant ($p \leq .02$). Table abbreviations are defined in Table 1.

TABLE 3

Correlations of Job Aspect Satisfactions with 4-40 Attitude

Job Aspect	r
Supervision	.04
Pay and Promotions	.15*
Company Benefits	.07
General Management	.06

*$p < .01$